

**We claim:**

1. A method for monitoring performance on a network, the method comprising:

- (a) running at least one performance monitor process on the network;
- (b) running a network monitor manager process on the network;
- 5 (c) establishing a socket connection from the network monitor manager process to said at least one performance monitor process to control said at least one performance monitor to send a pseudo message to an entry server; and
- (d) receiving the pseudo message from said at least one performance monitor process and determining a response for the pseudo message for each segment of the network traversed by
- 10 the pseudo message.

2. The method of claim 1, further comprising:

- (e) running at least one availability monitor process on the network;
- (f) from the response determined in step (d), detecting at least one possibly failed component of the network;
- 15 (g) sending a message from the at least one availability monitor process to the at least one possibly failed component; and
- (h) determining, in accordance with a result of the message, whether the at least one possibly failed component has failed.

3. The method of claim 1, further comprising:

- 20 (i) running a client-server monitoring process on a server dedicated to the client-server monitoring process;
- (j) receiving, in the client-server monitoring process, information about transactions executed by production applications on the network; and
- (k) determining performance and availability of the production applications in
- 25 accordance with the information received in step (j).

4. The method of claim 3, wherein step (j) comprises running a filtering agent on each of the production applications to convert the information into a form usable by the client-server monitoring process.

5. The method of claim 4, wherein:

5           the network comprises a mainframe having at least one logical partition which generates an application log; and

            the method further comprises (l) monitoring the application log through a mainframe monitoring process.

6. The method of claim 6, wherein:

10           the application log comprises transaction entries having end-user addresses; and  
            step (l) comprises categorizing the transaction entries by the end-user addresses.

7. The method of claim 6, further comprising (m) generating a performance report for the network through an administrative process and making the report available over a data network.

15           8. The method of claim 7, wherein the data network comprises the Internet.

9. The method of claim 8, further comprising:

(m)       receiving, in the client-server monitoring process, information about transactions executed by e-commerce applications on the network; and

(n)       determining performance and availability of the e-commerce applications in  
20       accordance with the information received in step (m) through an e-commerce monitoring process.

10. The method of claim 9, wherein at least one of the e-commerce applications makes at least one Web page accessible to customers, and wherein step (m) comprises placing code in the at least one Web page, the code sending time stamps to the client-server monitoring  
25       process when the code is accessed.

11. The method of claim 10, further comprising providing a central data repository, and wherein the network monitor manager process, the client-server monitoring process, the mainframe monitoring process, the administrative process, and the e-commerce monitoring process communicate with one another through the central data repository.

5 12. The method of claim 4, wherein each said filtering agent detects processes running on the network and cross-references the detected processes to known processes, and further comprising forming an event correlation engine in accordance with the detected processes.

13. The method of claim 12, wherein each said filtering agent detects changes to the processes running on the network, and further comprising maintaining the event correlation  
10 engine in accordance with the detected changes to the processes.

14. The method of claim 13, further comprising, when it is determined in step (k) that the performance or the availability of one of the production applications is impaired, determining and reporting a cause of impairment and its corresponding effect on an SLA in accordance with the event correlation engine.